

# WEST Search History

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*DB=PGPB; PLUR=NO; OP=ADJ*

<input type="checkbox"/>	L4	US-20040227128-A1.did.	1
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*DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ*

<input type="checkbox"/>	L3	\$dioxy\$thiophene\$ with mesogen\$	2
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<input type="checkbox"/>	L2	L1 same (liquid crystal\$ or mesogen\$)	37
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<input type="checkbox"/>	L1	\$dioxythiophene\$	976
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		<i>DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ</i>	
<input type="checkbox"/>	L2	jp-2003306531-\$.did. or ep-1182245-\$.did. or ep-1013413-\$.did. or us-5748271-\$.did. or us-20040253439-\$.did.	9

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		<i>DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ</i>	
<input type="checkbox"/>	L3	us-6852830-\$.did. or us-6852831-\$.did. or us-6756473-\$.did.	6
<input type="checkbox"/>	L2	11 and (mesogen\$ or liquid crystal\$)	0
		us-20030216540-\$.DID. or us-20020165338-\$.did. or de-19643031-\$.did. or us-5111327-	
<input type="checkbox"/>	L1	\$.did. or us-20030139505-\$.did. or us-5300575-\$.did. or us-20030176628-\$.did. or us-4959430-\$.did.	12

END OF SEARCH HISTORY

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(FILE 'HOME' ENTERED AT 20:34:28 ON 10 MAY 2005)

FILE 'CAPLUS' ENTERED AT 20:34:36 ON 10 MAY 2005

L1 2018 S ?DIOXYTHIOPHENE?  
L2 145985 S LIQUID CRYSTAL? OR MESOGEN?  
L3 47 S L1 AND L2

AN 2002:691027 CAPLUS  
 DN 137:385168  
 ED Entered STN: 12 Sep 2002  
 TI Preparation, thermotropic **liquid-crystalline** and  
 fluorescent properties of semi-rigid homo- and copoly(ester-imide)s  
 composed of 3,3'',4,4''-p-terphenyltetracarboxydiimide and  
 3,3',4,4'-biphenyltetracarboxydiimide  
 AU Sato, Moriyuki; Nakamoto, Yoshimi; Yonetake, Koichiro; Kido, Junji  
 CS Department of Material Science, Faculty of Science and Engineering,  
 Shimane University, Shimane, 690-8504, Japan  
 SO Polymer Journal (Tokyo, Japan) (2002), 34(8), 601-607  
 CODEN: POLJB8; ISSN: 0032-3896  
 PB Society of Polymer Science, Japan  
 DT Journal  
 LA English  
 CC 35-5 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 73  
 AB Semi-rigid homo- and copoly(ester-imide)s were prepared from bismethyl ester  
 of 3,3'',4,4''-p-terphenyltetracarboxydiimide and bisalcs. of  
 3,3',4,4'-biphenyltetracarboxydiimide by melt polycondensation and their  
 thermotropic **liq.-cryst.**, photo- (PL) and  
 electroluminescent (EL) properties were investigated. Differential  
 scanning calorimetry (DSC) measurements, polarizing microscope  
 observations of textures and powder X-Ray analyses suggested that  
 homopolymer having hexamethylene chain form monotropic smectic C or A  
 phase and most of copolymers form enantiotropic nematic phase. PL spectra  
 showed that the polymers emit blue light in the chloroform solns. and in  
 the films. EL spectra of polymers in double-layer devices  
 (ITO/poly(3,4-ethylene **dioxythiophene**) (PE DOT)/polymer/LiF or  
 Ca/Al), with blue emission, were almost identical to the PL spectra,  
 although luminances were very low. The poly(ester-imide)s can be used as  
 blue light-emitting and/or electron-transporting materials for organic EL  
 devices.  
 ST terphenyltetracarboxydiimide biphenyltetracarboxydiimide polyester  
 polyimide synthesis thermotropic **liq crystal**; thermal  
 property photoluminescence electroluminescence polyester polyimide light  
 emitting device  
 IT UV absorption  
 (UV-visible; preparation, thermotropic **liq.-cryst.** and  
 fluorescent properties of poly(ester-imide)s)  
 IT Polyimides, preparation  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)  
 (polyester-; preparation, thermotropic **liq.-cryst.** and  
 fluorescent properties of poly(ester-imide)s)  
 IT Polyesters, preparation  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)  
 (polyimide-; preparation, thermotropic **liq.-cryst.** and  
 fluorescent properties of poly(ester-imide)s)  
 IT Band gap  
 Crystal structure  
 Crystallization temperature  
 Electroluminescent devices  
 Emissivity  
 Glass transition temperature  
 Luminescence  
 Luminescence, electroluminescence  
 Melting point  
 Phase transition temperature  
 Solubility  
 (preparation, thermotropic **liq.-cryst.** and fluorescent  
 properties of poly(ester-imide)s)  
 IT **Liquid crystals**, polymeric

(thermotropic; preparation, thermotropic liq.-cryst. and fluorescent properties of poly(ester-imide)s)

IT 67-56-1, Methanol, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (esterification with terphenyltetracarboxylic dianhydride/aminoundecanoic acid reaction products)

IT 106070-55-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (in reaction with aminoundecanoic acid)

IT 2432-99-7, 11-Aminoundecanoic acid  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (in reaction with terphenyltetracarboxylic dianhydride)

IT 475994-88-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (monomer; prepn of, and in polymerization with bisalcs. of biphenyltetracarboxydiimide)

IT 475994-89-9P 475994-90-2P 475994-91-3P 475994-92-4P 475994-93-5P  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (preparation, thermotropic liq.-cryst. and fluorescent properties of poly(ester-imide)s)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD

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AN 2003:191562 CAPLUS  
 DN 138:288067  
 ED Entered STN: 11 Mar 2003  
 TI **Liquid-crystal** templating of conducting polymers  
 AU Hulvat, James F.; Stupp, Samuel I.  
 CS Department of Materials Science and Engineering Department of Chemistry  
 Feinberg School of Medicine, Northwestern University, Evanston, IL,  
 60208-3108, USA  
 SO Angewandte Chemie, International Edition (2003), 42(7), 778-781  
 CODEN: ACIEF5; ISSN: 1433-7851  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 CC 35-7 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 36  
 AB The formation of poly(3,4-**ethylenedioxythiophene**) films by  
 electropolymn. within the hydrophobic domain of a liq.  
**cryst.** template was studied. **Liq. crystal**  
 gels were prepared by dissolving 3,4-**ethylenedioxythiophene** (EDOT)  
 monomer and NEt<sub>4</sub>+ClO<sub>4</sub><sup>-</sup> (supporting electrolyte) in poly(oxyethylene)<sub>n</sub>  
 oleyl ether (n .apprx.10) LC phase. EDOT polymerization in LC gels was  
 conducted  
 potentiostatically on Au- or ITO-coated glass substrates. After  
 polymerization,  
 the LC gels were removed and the morphol. of the obtained PEDOT was examined  
 ST **polyethylenedioxythiophene** electropolymn liq  
**crystal** polyoxyalkylene ether template; birefringence morphol  
**polyethylenedioxythiophene** electrochem polymd liq  
**crystal** template  
 IT Conducting polymers  
 (formation of poly(3,4-**ethylenedioxythiophene**) films by  
 electropolymn. within liq. **cryst.** template)  
 IT Birefringence  
 Electric conductivity  
**Liquid crystals**  
 (formation of poly(**ethylenedioxythiophene**) films by  
 electropolymn. within liq. **cryst.** template gel)  
 IT Conducting polymers  
 (polythiophenes; formation of poly(**ethylenedioxythiophene**)  
 films by electropolymn. within liq. **cryst.** template  
 gel)  
 IT Polymer morphology  
 (surface; formation of poly(**ethylenedioxythiophene**) films by  
 electropolymn. within liq. **cryst.** template gel)  
 IT 126213-51-2P, Poly(3,4-**ethylenedioxythiophene**)  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (formation of poly(**ethylenedioxythiophene**) films by  
 electropolymn. within liq. **cryst.** template gel)  
 IT 9004-98-2, Poly(oxyethylene) oleyl ether  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (liq. **crystal**; formation of poly(  
**ethylenedioxythiophene**) films by electropolymn. within  
 liq. **cryst.** template gel)  
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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